

CLAIMS

- [c1] 1. A method for providing privacy of user identity and characteristics in a communication system, comprising the steps of:
- transmitting a public key from a transceiver to a communication device;
- receiving one or more initial messages from said wireless communication device, wherein at least a portion of said one or more initial messages are encrypted using said public key; and
- decrypting said encrypted portion of said one or more initial messages using a private key corresponding to said public key.
- [c2] 2. The method of claim 1 wherein said encrypted portion of said initial message comprises an identification of said communication device.
- [c3] 3. The method of claim 1 further comprising the step of:
- allocating resources to initiate a communication between said wireless communication device and a second communication device.
- [c4] 4. The method of claim 3, wherein said communication comprises a secure communication.
- [c5] 5. The method of claim 1 further comprising the step of signing said public key for authentication purposes prior to the step of transmitting said public key.
- [c6] 6. The method of claim 1 wherein said public key is transmitted at a predetermined event.
- [c7] 7. The method of claim 6 wherein said predetermined event comprises an expiration of a timer.
- [c8] 8. Apparatus for providing privacy of user identity and characteristics in a communication system, comprising:
- a processor for generating a public key and a private key associated with a transceiver;
- a transmitter, coupled to said processor, for transmitting said public key to a

communication device;

a receiver, coupled to said processor, for receiving one or more initial messages from said wireless communication device, wherein at least a portion of said one or more initial messages is encrypted using said public key; and

a decryption processor for decrypting said portion of said one or more initial messages using said private key.

[c9] 9. The apparatus of claim 8, wherein said portion of said initial message comprises an identification of said communication device.

[c10] 10. The apparatus of claim 8 wherein said processor is further for allocating resources to initiate communication between said wireless communication device and a second communication device.

[c11] 11. The apparatus of claim 8 further comprising an encryption processor for signing said public key for authentication purposes prior to transmitting said public key to said communication device.

[c12] 12. A method for providing privacy of user identity and characteristics in a communication system, comprising the steps of:

receiving a public key from a transceiver; and

transmitting one or more initial messages to said transceiver, wherein at least a portion of said one or more initial messages is encrypted using said public key.

[c13] 13. The method of claim 12, wherein said portion of said initial message comprises an identification of said communication device.

[c14] 14. The method of claim 12 further comprising the step of:

performing an authentication procedure on said public key to determine if said public key was transmitted by a trusted entity.

[c15] 15. An apparatus for providing privacy of user identity and characteristics in a communication system, comprising:

a receiver for receiving a public key from a transceiver;

a processor for encrypting at least a portion of one or more an initial messages with said public key; and

a transmitter for transmitting said one or more initial messages to said transceiver.

[c16] 16. The apparatus of claim 15 wherein said public key is signed and said processor is further for decrypting said public key and performing an authentication procedure on said public key to determine if said public key was transmitted by said transceiver.

[c17] 17. The apparatus of claim 15 wherein said portion of said one or more initial messages comprises an identification of said communication device.

[c18] 18. A system for providing privacy of user identity and characteristics in a communication system, comprising:

a transceiver, comprising:

a processor for generating a public key and a private key associated with a transceiver;

a transmitter, coupled to said processor, for transmitting said public key to a communication device;

a receiver, coupled to said processor, for receiving one or more an initial messages from said wireless communication device, wherein at least a portion of said one or more initial message s is encrypted using said public key;

a decryption processor for decrypting said portion of said one or more initial messages using said private key;

said communication device comprising:

a second receiver for receiving said public key from said transceiver;

a second processor for encrypting at least a portion of said one or more initial messages with said public key; and

a second transmitter for transmitting said one or more encrypted initial messages to said transceiver.

[c19] 19. The system of claim 18, wherein said portion of said one or more initial messages comprises an identification of said communication device.

[c20] 20. A method for providing privacy of user identity and characteristics in a

communication system, comprising the steps of:

- generating a public key and a private key corresponding to a transceiver;
- transmitting said public key to a communication device;
- encrypting at least a portion of one or more an initial messages using said public key;
- transmitting said one or more initial messages from said communication device to said transceiver; and
- decrypting at least said portion of said one or more initial messages using said private key.

[c21] 21. The method of claim 20, further comprising the step of allocating resources to initiate a communication between said wireless communication device and a second communication device.

[c22] 22. The method of claim 21, wherein said communication comprises a secure communication.

[c23] 23. The method of claim 20, wherein said portion of said one or more initial messages comprises an identification of said communication device.